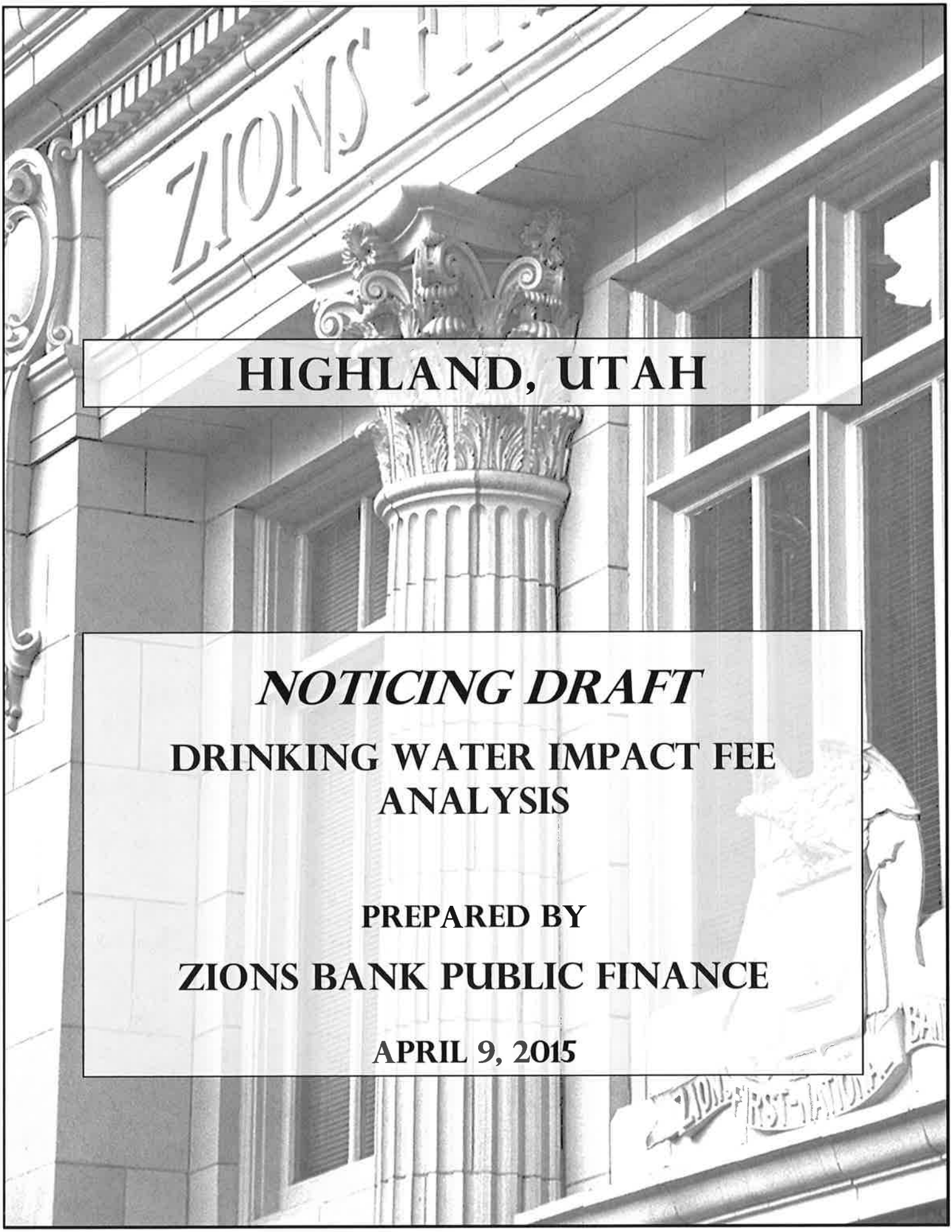

HIGHLAND, UTAH

NOTICING DRAFT

DRINKING WATER IMPACT FEE ANALYSIS

PREPARED BY

ZIONS BANK PUBLIC FINANCE

APRIL 9, 2015

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LIST OF FIGURES

EXECUTIVE SUMMARY

Zions Bank Public Finance (Zions) is pleased to provide Highland City (the City) with an update to the drinking water impact fees. The following pages summarize the document and tables included. The intent is to provide a concise discussion of the calculation and identification of the maximum legal impact fee.

Growth and ERC Projections

The area of the City that the drinking water impact fee will be assessed is currently undeveloped. The South East area of the City is expected to develop rapidly and most likely develop within the next ten years. It is projected that the Service Area will develop to 1,160 equivalent residential connections (ERCs). The following table identifies the current and future ERCs in the South East Service Area. The analysis considers growth over the next six to ten years. The full growth table can be found in Appendix 1 of the document. The remainder of the City has been previously served by the Highland Water Company.

Figure ES1: Drinking Water ERCs Served by Highland City

Drinking Water		
	Current	Buildout
Current ERCs[1]	-	1,160

[1] *HAL 2015 IFFP*

Level of Service Definitions

Hansen Allen & Luce defined the City's level of service in the Impact Fee Facilities Plan. The plan states the following:

Level of Service Summary	
ERCs	1
Peak Day Source Flow Rate (gpd)	800
Distribution Minimum Operating Pressure	50 psi
Fire Suppression Residual Pressure	20 psi

PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the Impact Fee Analysis estimate the proportionate share of the costs for existing capacity that will be recouped and the costs of impacts on system improvements that are reasonably related to the new development activity.

Part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. A City typically funds drinking water infrastructure through several different funding sources including:

- User Fees (rate revenues)
- Grants
- Bond Proceeds
- Developer Exactions
- Impact Fees

All of these funding sources (with exception of developer contributions/donations) are impact fee qualifying expenses to be considered for buy-in purposes. However, this area is currently undeveloped and there is no infrastructure, therefore, there is no buy-in for this service area.

In consideration of future capital improvements, the City will continue using similar funding sources; no grants are being considered or are available at this time. Using impact fees places a burden on future users that is equal to the burden that was borne in the past by existing users.[1]

Existing Infrastructure and Capacity to Serve New Growth (Buy-In Component)

There is no existing infrastructure in this area. Therefore, there will be no buy-in component.

Future Capital Improvements

Hansen Allen & Luce provided a list of capital projects to be constructed in the next ten years and the corresponding percentage of the projects that will benefit growth through the next ten years. The 2014 fiscal year total of capital improvements is $1,918,050. The IFFP defines approximately 100% of the cost will be included into the impact fee.

Outstanding and Future Debt

There is no outstanding drinking water related debt in Highland. It is currently not anticipated that the City will bond for drinking water in the next ten years.

Calculated Fee

The impact fees have been calculated with all the above considerations for the South East Service Area. The fee is calculated per ERC. For non-residential land uses, new connections will pay the fee based on the equivalent residential connections each land use generates. The Highland City Council has the discretion to set the actual impact fees to be assessed, but they may not exceed the maximum allowable fee calculated. The City may, on a case by case basis, work directly with a developer to adjust the standard impact fee to respond to unusual circumstances and ensure that impact fees are imposed fairly. This adjusted impact fee calculation will be based on the calculation found in Figure ES3.

Figure ES2: Maximum Legal Fee per ERC

Meter Size	Operating Flow	Equivalency Ratios	Proposed Impact Fee
Displacement Meters			
Single Family Residential Equivalent 0.75"	25	1.00	$ 1,653
0.75"	25	1.00	1,653
1"	40	1.60	2,646
1.5"	50	2.00	3,307
2"	100	4.00	6,614
Class II Turbine Meters - High Velocity			
1.5"	100	4.00	$ 6,614
2"	160	6.40	10,582
3"	350	14.00	23,149
4"	630	25.20	41,668
6"	1,400	56.00	92,596
8"	2,400	96.00	158,735
10"	3,800	152.00	251,331
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Compound Meters			
2"	160	6.40	$ 10,582
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6"	1,000	40.00	66,140
8"	1,600	64.00	105,823
10"	2,300	92.00	152,121

[1] Utah Impact Fees Act, 11-36a-304(2) (c) (d)

Figure ES3: Non-Standard Calculation

Drinking Water Non-Standard Impact Fee Formula
Step 1: Identify Peak Day Demand of Proposed Development
Step 2: Multiply Peak Day Demand (Gallons) by Price per Gallon of $2.07

CHAPTER 1: IMPACT FEE OVERVIEW

PROJECT OVERVIEW

Zions Bank Public Finance (Zions) is pleased to provide Highland City (the City) with an update to the drinking water impact fees. Highland realizes that due to the age of its current analysis, as well as changes to the Impact Fees Act, required updates and review of its impact fees as well as its facility planning are needed. The City is still growing rapidly and has many capital needs. The update to the analysis is an intensive, collaborative effort that meets the needs of City stakeholders and the City. The information used to create this fee analysis was provided by City staff, Zions Bank Public Finance and Hansen Allen & Luce.

The goal of the impact fee analysis is to calculate the maximum impact fee that may be assessed to new development and ensure the fee meets the requirements of the Impact Fees Act, Utah Code 11-36a-101 *et seq.* The sections and subsections of the Impact Fee Analysis will directly address the following items, required by the code:

- Impact Fee Analysis requirements (Utah Code 11-36a-304)
  - Identify existing capacity to serve growth
    - Proportionate share analysis
  - Identify the level of service
  - Identify the impact of future development on exisitng and future improvements
- Calculated fee (Utah Code 11-36a-305)
- Certification (Utah Code 11-36a-306)

WHY IS THE CITY UPDATING THE EXISTING ANALYSIS?

The City has commissioned this Drinking Water Impact Fee Analysis amendment to accomplish the following:

- Determine the maximum impact fee that may be assessed to new development;
- Update capital need projections and account for historic costs of facilities;
- Put the analysis in compliance with the changes to the Impact Fees Act effective May 2011;
- Include an Impact Fee Facilities Plan (IFFP) with a ten year capital planning horizon; and
- More clearly define the current level of service and the future level of service that the City will provide.

WHAT IS AN IMPACT FEE?

An impact fee is a one-time fee, not a tax, charged to new development to recover the City's cost of constructing water collection facilities with capacity to serve new growth. The fee is assessed at the time of building permit issuance as a condition of development approval. The calculation of the impact fee must strictly follow the Impact Fees Act to ensure that the fee is equitable and fair.

This analysis shows that there is a fair comparison between the impact fee charged to new development and the impact the new development will have upon the system in terms of taking available capacity. Impact fees are charged to development according to a number of ERCs generated, which is a realistic measure of the potential water demands that each user will add to the system.

HOW WILL NEW GROWTH AFFECT THE CITY?

According to the current Impact Fee Facilities Plan, the Service Area does not have any existing ERCs and the plan estimates that over the next ten years the City will add approximately 1,160 ERCs.

Population growth is important in Impact Fee Facilities Planning as population, in addition to non-residential demands, drive project needs and timing. However, this drinking water impact fee analysis is not population dependent as the system is sized for commercial, industrial, institutional, churches, schools, etc. The primary measurement of capacity and demand in a drinking water system is an ERC. The fee is based on capacity available in

the existing system and in future projects and is not directly dependent upon population or upon the growth rate, as non-residential demands have a great impact upon the drinking water system.

Figure 1: Projected Growth Drinking Water ERCs

Drinking Water		
	Current	Buildout
Current ERCs[1]	-	1,160

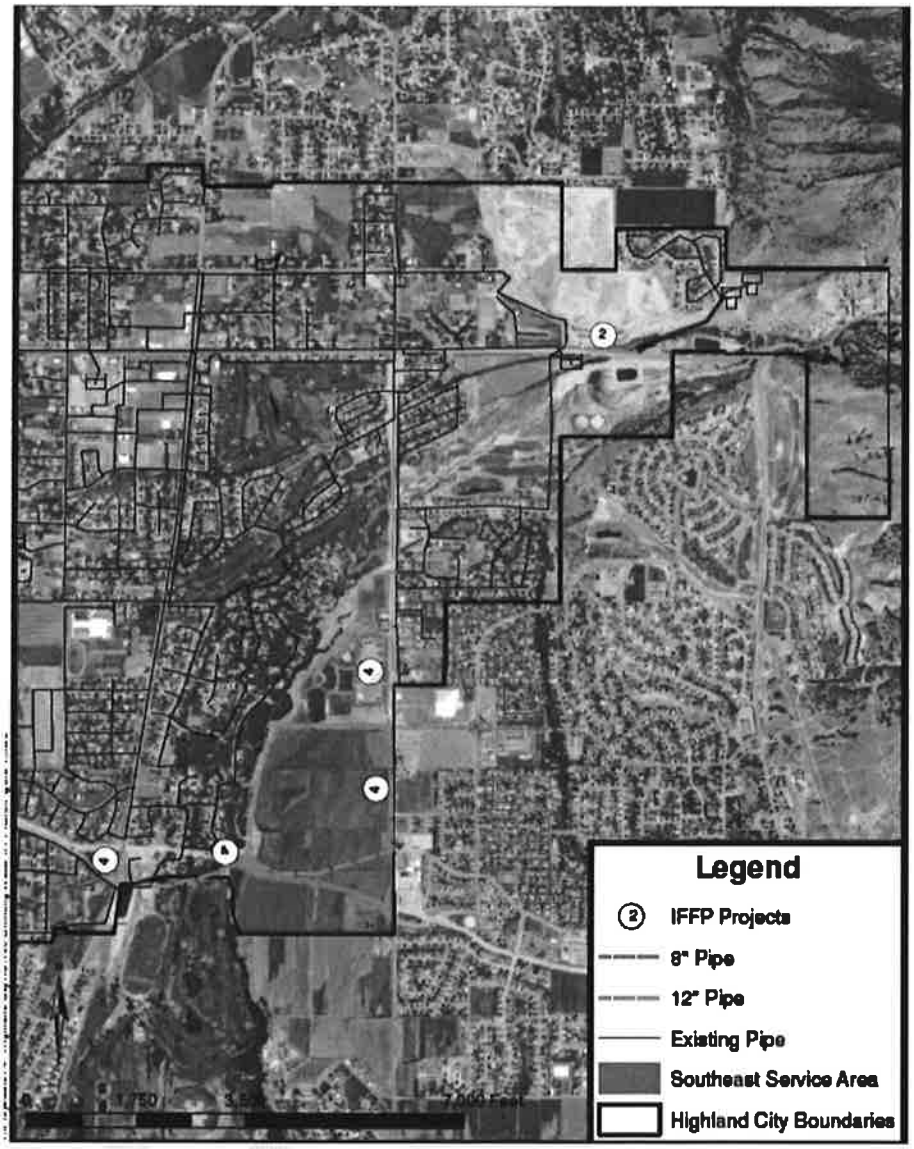
Why Are Impact Fees Necessary?

Impact fees are necessary to allocate the costs of unused drinking water system capacity that is reserved for new growth to the developments that will benefit from it. Impact fees help to shield existing users from shouldering the burden of paying not only for the capacity that they use but also from funding the cost of capacity needed for new development to occur.

Where Will the Impact Fees Be Assessed?

The impact fees will be assessed within the City's Drinking Water South East Service Area, which undeveloped areas to which the City will provide drinking water service. A detailed map of the area included in the attached appendix shows the Service Area served by the City. In short, if a developer is requesting a building permit and will be served by the City's drinking water system then that property is included in the South East Service Area.

Figure 2: Service Area Map



What Costs are Included in the Impact Fee?

Impact fee revenues may not be spent on capital projects or associated costs, such as financing interest expense that constitute repair and replacement, cure any existing deficiencies, or maintain the existing level of service for current users. Impact fees cannot fund operational expenses. The proposed impact fees will be assessed throughout the entire Impact Fee Service Area.

The impact fees proposed in this analysis are calculated based upon:

- Costs of replacement facilities that are needed to perpetuate unused capacity in the system that growth will require;
- New capital infrastructure that provides new capacity for growth;
- Historic costs of existing improvements that maintain capacity that will serve new development; and

- Cost of professional services for engineering, planning services and preparation of the impact fee facilities plan and impact fee analysis.

What Costs Are Not Included in the Impact Fee?

The costs, both direct capital and financing, that cannot be included in the impact fee are as follows:

- Projects that cure deficiencies for existing users;
- Projects that increase the level of service above that which is currently provided;
- Operations and maintenance costs;
- Costs of facilities funded by grants or other funds that the City does not have to repay; and
- Costs of reconstruction of facilities that do not have capacity to serve new growth.

How Are Impact Fees Calculated?

To calculate a fair impact fee we determine a growth related cost of existing and future facilities and divide that by the number of new units that will benefit from the unused capacity. A cost per unit is calculated by dividing impact fee qualifying cost by the amount of capacity to derive the cost per capacity unit. This cost per unit of capacity is then multiplied by the amount of demand that a typical residential home or ERC would utilize.

The general impact fee methodology splits the capacity in existing facilities and future capital projects between that which already benefits existing users and capacity that is available to benefit new growth. A cost is assigned to the capacity that is available for new growth based upon the historic cost of water and secondary water facilities and the future costs of water infrastructure. A final fee per residential or non-residential land use is calculated by multiplying the cost per ERC by the number of ERCs that each new unit of development will generate.

What is the Current Level of Service?

The IFFP has defined the current level of service as:

- Water: 800 gallons per Equivalent Residential Connection at peak day demand.[2]

However, it must be considered that although this is the average day ERC, the system will be sized to meet peak. The peak day flow calculation and consideration is in the table below.

Level of Service Summary	
ERCs	1
Peak Day Source Flow Rate (gpd)	800
Distribution Minimum Operating Pressure	50 psi
Fire Suppression Residual Pressure	20 psi

How are Schools Considered in this Analysis?

The Impact Fees Act exempts schools from paying a parks and recreation impact fee but with proper documentation of the impact that a school could place on the drinking water system, the City can assess an impact fee for schools. The Drinking Water Impact Fee Analysis quantifies the cost per ERC and also defines the number of ERCs that can be served by each size of culinary water meter that a school could install. The impact that a school will have upon the water system is clearly defined by water usage/ERCs.

[2] HAL Impact Fee Facilities Plan

CHAPTER 2: FUTURE CAPITAL PROJECTS AND LEVEL OF SERVICE

IMPACT FEE ANALYSIS REQUIREMENTS

Growth and ERC Projections

According to the 2010 Census the population at that time was 15,523[3]. Population is important in the Capital Facilities and Impact Fee Facilities planning as population, and other factors, drive project need and timing. However, this impact fee analysis is not population dependent. The driving force is the Equivalent Residential Connection (ERC). The Impact Fee Facilities Plan defines an ERC as 800 gallons per peak day usage[4]. Currently the City has no equivalent residential connections. In the next six to ten years it is anticipated that the City will grow to 1,160 ERCs.

There will be significant growth expected within the City's boundaries and increased demand on the City's collection facilities which will require new projects to meet further demand. The area is growing at a very rapid pace. The growth projections in ERCs are found in the appendix of this document.

Level of Service Definitions

The Impact Fee Facilities Plan has defined the current level of service in Highland as:

- Drinking Water Peak Day Demand: 800 gallons per day per indoor ERC
- Distribution Minimum Operating Pressure 50 psi
- Fire Suppression Residual Pressure 20 psi

Existing Infrastructure and Capacity to Serve New Growth (Buy-In Component)

The South East Service Area is currently undeveloped and has no existing infrastructure. There is no buy-in component calculated in this impact fee analysis.

Impact Fee Facilities Plan – Future Capital Projects

The Impact Fee Facilities Plan developed the following capital projects, helped determine the timing and identified what was growth related, and of that amount, how much of the total capacity will be realized in the next ten years (percentage Impact Fee Qualifying & Impact Fee Qualifying Cost).

Figure 3: Capital Projects by Service Area

Project Name	Year to be Constructed	FY 2015 Cost	Construction Cost	% to 10 Year Growth	Impact Fee Qualifying Cost	Non/Beyond 10 Year Growth Related
South East Service Area						
11000 N 12" Transmission Line	2015	$ 164,000	$164,000.00	100%	$ 164,000	$ -
Southeast Area and Lone Peak High School	2015	1,741,000	1,741,000	100%	1,741,000	-
Impact Fee Facilities Plan	2015	9,300	9,300	100%	9,300	-
Impact Fee Analysis	2015	3,750	3,750	100%	3,750	-
Total IFFP Cost		$1,918,050	$ 1,918,050		$ 1,918,050	$ -

[3] 2010 Census Data
[4] HAL IFFP

CHAPTER 3: PROPORTIONATE SHARE ANALYSIS

The Impact Fees Act requires that the Impact Fee Analysis estimate the proportionate share of the costs for existing capacity that will be recouped; and the costs of impacts on system improvements that are reasonably related to the new development activity.

Highland continues to grow and there is still expansion in the area. The Impact Fee Facilities Plan clearly defines what projects are growth related, repair and replacement, or pipe upsizing (the upsizing may include some element of growth).

Part of the proportionate share analysis is a consideration of the manner of funding existing public facilities. The City may fund existing infrastructure through several different funding sources including:

- User Rates (rate revenues)
- Grants
- Bond Proceeds
- Developer Exactions
- Impact Fees

In order to ensure fairness to existing users, impact fees are an appropriate means of funding future capital infrastructure. Using impact fees places a burden on future users that is equal to the burden that was borne in the past by existing users. (Utah Impact Fees Act, 11-36a-304(2)(c)(d))

Just as existing infrastructure has been funded through different means; it is required by the Impact Fees Act to evaluate all means of funding future capital. There are positives and negative aspects to the various forms of funding. It is important to evaluate each.

User Rates

User rates have both been funded in one form or another by existing users. It would be an additional burden to existing users to use this revenue source to fund future capital to meet the needs of future users. This is not an equitable policy and can place too much stress on the tight budgets of the drinking water operating fund and other user rate funds. The water rates in Highland are dedicated to payments on the public works building, operation and maintenance, repair and replacement and ensuring a stable reserve for maintaining a good credit rating. If rate revenues are required to supplement the capital required by growth, the City will reimburse the user rate fund with impact fees as they are collected and act as a loan to the impact fee fund to be repaid.

Property Taxes

It is true that property taxes may be a stable source of income. However, property taxes are not typically used to fund drinking water infrastructure. Property taxes are based upon property valuation. Using property taxes to fund future capital again places too much burden on existing users and subsidizes growth. The financial audits for the City do not show a line item for property taxes as a revenue stream for drinking water, thus any property taxes collected on the property being developed is not being used to fund infrastructure or operation and maintenance of the water system.

Impact Fees

Impact fees are a fair and equitable means of providing infrastructure for future development. They provide a rational nexus between the costs borne in the past and the costs required in the future. The Impact Fees Act ensures that future development is not paying any more than what future growth will demand. Existing users and future users receive equal treatment; therefore, impact fees are the optimal funding mechanism for future growth relate

Developer Credits

If a project included in the Impact Fee Facilities Plan (or a project that will offset the demand for a system improvement that is listed in the IFFP) is constructed by a developer that developer is entitled to a credit against impact fees owed. (Utah Impact Fees Act, 11-36a-304(2)(f))

Time-Price Differential

Utah Code 11-36a-301(2)(h) allows for the inclusion of a time-price differential in order to create fairness for amounts paid at different times. All users who pay an impact fee today or within the next six to ten years will benefit from projects to be constructed and included in the fee.

Other

In this particular analysis, there is also a credit for unspent impact fee revenues collected in the past. The current impact fee fund balance for water was credited against the fee.

Calculated Fee

The impact fees have been calculated with all the above considerations for the Central and South East Service Areas. The fee is calculated per a single ERC. The fees per ERC can be found in Figure 5. These tables can also be found in Appendix 3. The Highland City Council has the discretion to set the actual impact fees to be assessed, but they may not exceed the maximum allowable fee calculated. The City may, on a case by case basis, work directly with a developer to adjust the standard impact fee to respond to unusual circumstances and ensure that impact fees are imposed fairly. This adjusted impact fee calculation will be based on the calculation found in Figure 5.

Figure 4: Base Fee per ERC

Meter Size	Operating Flow	Equivalency Ratios	Proposed Impact Fee
Displacement Meters			
Single Family Residential Equivalent 0.75"	25	1.00	$ 1,653
0.75"	25	1.00	1,653
1"	40	1.60	2,646
1.5"	50	2.00	3,307
2"	100	4.00	6,614
Class II Turbine Meters - High Velocity			
1.5"	100	4.00	$ 6,614
2"	160	6.40	10,582
3"	350	14.00	23,149
4"	630	25.20	41,668
6"	1,400	56.00	92,596
8"	2,400	96.00	158,735
10"	3,800	152.00	251,331
12"	5,000	200.00	330,698
Compound Meters			
2"	160	6.40	$ 10,582
3"	320	12.80	21,165
4"	500	20.00	33,070
6"	1,000	40.00	66,140
8"	1,600	64.00	105,823
10"	2,300	92.00	152,121

The City will assess the impact fee on a per ERC basis for residential and nonresidential land uses.

Figure 5: Non-Standard Impact Fee Calculation

Drinking Water Non-Standard Impact Fee Formula
Step 1: Identify Peak Day Demand of Proposed Development
Step 2: Multiply Peak Day Demand (Gallons) by Price per Gallon of $2.07

CHAPTER 4: CERTIFICATION AND APPENDICES

In accordance with Utah Code Annotated, 11-36a-306(2), Zions Bank Public Finance makes the following certification:

I certify that the attached impact fee analysis:

1. includes only the cost of public facilities that are:
   a. allowed under the Impact Fees Act; and
   b. actually incurred; or
   c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
   a. costs of operation and maintenance of public facilities;
   b. cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
   c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement;
3. offset costs with grants or other alternate sources of payment; and
4. complies in each and every relevant respect with the Impact Fees Act.

Zions Bank Public Finance makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plans ("IFFPs") made in the IFFP documents or in the impact fee analysis documents are followed in their entirety by Highland staff and elected officials.
2. If all or a portion of the IFFPs or impact fee analyses are modified or amended, this certification is no longer valid.
3. All information provided to Zions Bank Public Finance, its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by Highland City and outside sources. Copies of letters requesting data are included as appendices to the IFFPs and the impact fee analysis.

Dated: April 9, 2015

ZIONS BANK PUBLIC FINANCE

By Zions Bank Public Finance

APPENDICES

Notice Date & Time: March 13, 2015 | 12:00 AM

Description/Agenda:
NOTICE OF INTENT TO CREATE IMPACT FEE FACILITIES PLANS AND AMENDED IMPACT FEE WRITTEN ANALYSES

Highland City, a municipality of the State of Utah, located in Utah County, Utah intends to commence the preparation of independent and comprehensive Impact Fee Facilities Plans and Written Impact Fee Analyses for the services of culinary water for the south east service area. Therefore, pursuant to the provisions of 11-36a-501 and 503 of the Utah Code, as amended 2011, notice is hereby provided to you of the intent of Highland City to create an Impact Fee Facilities Plans and amend Highland City's Impact Fee Written Analyses. The location(s) that will be included in the Impact Fee Facilities Plans and Impact Fee Analyses are all areas within the legal Highland City limits and the declared annexation areas of Highland City.

Notice of Special Accommodations:

FOR SPECIAL ACCOMMODATIONS Any individual with a qualified disability may request a reasonable accommodation by contacting the City Recorder at (801) 772-4505 at least 48 hours prior to the Commission meeting.

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Appendix 1:
CURRENT AND FUTURE ERCs

Culinary Water		
	Current	Buildout
Current ERCs[1]	-	1,160

[1] *HAL 2015 IFFP*

Appendix 2:
CAPITAL PROJECTS - IMPACT FEE FACILITIES PLAN
Inflation Rate* 4%

Culinary Water

Project Name	Year to be Constructed	FY 2015 Cost	Construction Cost	% to 10 Year Growth	Impact Fee Qualifying Cost	Non/Beyond 10 Year Growth Related
South East Service Area						
11000 N. 12" Transmission Line	2015	$ 164,000	$164,000.00	100%	$ 164,000	$ -
Southeast Area and Lone Peak High School	2015	1,741,000	1,741,000	100%	1,741,000	-
Impact Fee Facilities Plan	2015	9,300	9,300	100%	9,300	-
Impact Fee Analysis	2015	3,750	3,750	100%	3,750	-
Total IFFP Cost		**$ 1,918,050**	**$ 1,918,050**		**$ 1,918,050**	**$ -**

Appendix 3:
BASE FEE PER ERC
Highland Impact Fee

South East Service Area	Cost	% Impact Fee Qualifying	Impact Fee Qualifying Cost	ERCs to be Served	Cost per ERC
Drinking Water Impact Fee					
IFFP Projects	$ 1,918,050	100%	$ 1,918,050	1,160	$ 1,653
Buy In - Existing Assets	-	0%	-	1,160	-
Subtotal	1,918,050	100%	1,918,050		1,653
Total Impact Fee per ERC					**$ 1,653**

Meter Size	Operating Flow	Equivalency Ratios	Proposed Impact Fee
Displacement Meters			
Single Family Residential Equivalent 0.75"	25	1.00	$ 1,653
0.75"	25	1.00	1,653
1"	40	1.60	2,646
1.5"	50	2.00	3,307
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Class II Turbine Meters - High Velocity			
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Drinking Water Non-Standard Impact Fee Formula
Step 1: Identify Peak Day Demand of Proposed Development
Step 2: Multiply Peak Day Demand (Gallons) by Price per Gallon of $2.07

DRINKING WATER
IMPACT FEE FACILITY PLAN SUMMARY

The purpose of the Drinking Water Impact Fee Facilities Plan ("IFFP"), with supporting Impact Fee Analysis ("IFA"), is to fulfill the requirements established in Utah Code Title 11 Chapter 36a, the "Impact Fees Act," and assist Highland City (the "City") to plan necessary capital improvements for future growth. The IFFP addresses only the future drinking water infrastructure needed to serve the Utah State Developmental Center (USDC) properties located in the southeast corner of the City.

The Plan summarizes the following:

- The Level of Service (LOS) for the existing drinking water system
- Demands placed upon the existing drinking water facilities by new development
- The proposed facilities by which the City will meet these demands

The following summarizes the plan:

Existing System and Level of Service

The existing Drinking Water System is comprised of a pipe network, water storage tanks and water supply sources. The existing system provides drinking water and fire suppression to all residents of Highland City. The City's existing system does not currently service the undeveloped properties.

The existing system has excess capacity within its sources, storage and distribution facilities to service the area with drinking water. However, costs incurred to create the existing system cannot be factored into the impact fees because the Water Company, not the City, funded the cost to construct the facilities. Therefore, only costs for future projects are included in the impact fees.

The LOS provided by the Drinking Water System has been established by the City to be the Standards required by the State of Utah Division of Drinking Water for indoor water use and found in the Utah State Administrative Code R309-510.

Demands placed on the Existing System by New Development

In 2012 a Drinking Water Master Plan was produced by the City. The Master Plan identified necessary transmission lines needed to convey drinking water to the proposed USDC development.

The IFFP included only projects that are required for the new development over the next 10 years. Those projects are listed below and include only new transmission lines. The total amount for drinking water impact fee facilities listed in Table S-1 is $1,914,300 in 2015 dollars.

TABLE S-1: IMPACT FEE FACILITIES FOR UPCOMING 10-YEARS

TYPE	RECOMMENDED PROJECT	Cost Estimate
Distribution – Growth Project	Master Plan #2 Project – Install 1,200 feet of 12-inch transmission line in 11000 North from Well #2 to Park Drive (near the City's Operations Building). The line is required to provide fire suppression flows to the southeast area.	$164,000
Distribution – Growth Project	Master Plan #14 Project – Install 14,000 feet of 12-inch transmission line for new development. Also included connection to 4800 West and the existing Lone Peak School loop and canal crossing.	$1,741,000
IFFP – Growth Project	Impact Fee Facility Plan	$9,300
	TOTAL	**$1,914,300**

DRINKING WATER IMPACT FEE FACILITY PLAN

(HAL Project No.: 314.15.100)

April 2015

HIGHLAND CITY

DRINKING WATER
IMPACT FEE FACILITY PLAN

(HAL Project No.: 314.15.100)

Tavis B. Timothy, P.E.
Project Engineer

HANSEN ALLEN & LUCE INC
ENGINEERS

April 2015

CERTIFICATION OF IMPACT FEE FACILITY PLAN

I certify that, to the best of my knowledge, the attached impact fee facilities plan:

1. includes only the costs of public facilities that are:
   a. allowed under the Impact Fees Act; and
   b. actually incurred; or
   c. projected to be incurred or encumbered within six years after the day on which each impact fee is paid;
2. does not include:
   a. costs of operation and maintenance of public facilities;
   b. costs for qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
   c. an expense for overhead, unless the expense is calculated pursuant to a methodology that is consistent with generally accepted cost accounting practices and the methodological standards set forth by the federal Office of Management and Budget for federal grant reimbursement; and
3. complies in each and every relevant respect with the Impact Fees Act.

Prepared by: _____
Tavis B. Timothy, P.E.

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IMPACT FEE FACILITY PLAN

EXECUTIVE SUMMARY

The purpose of this Impact Fee Facility Plan (IFFP) is to provide direction to Highland City regarding facilities required for future drinking water connections for the Utah State Developmental Center (USDC) properties located in the southeast corner of the City. The City owns, operates and maintains the drinking water system that would service the property.

Previous to 2005 the drinking water system in Highland was owned and operated by the Highland Water Company. During the fall of 2004 the Highland Water Company voted to dissolve the Company and transfer all assets and obligations to the City of Highland. As the City of Highland did not pay to construct any of the existing water facilities, none of the costs incurred to create the existing system will be factored into the impact fee. This IFFP only addresses projects for the distribution of drinking water and fire suppression to the southeast area (USDC properties).

Data from the 2012 Drinking Water Master Plan and additional data provided by the City is the basis for this IFFP. The IFFP considers growth over the next ten years to 2024. It is anticipated that the USDC property will have developed completely by 2024.

During the preparation of the IFFP, existing and proposed levels of service were determined for distribution, and fire suppression components of the drinking water system (see Table 1) for a single equivalent residential connection (ERC). In each case, it was determined that the proposed level of service should be the same as the Drinking Water Systems existing level of service.

Table 1
Level of Service Per ERC

Distribution	Peak Day Source Flow Rate (gpm)	0.55
Distribution	Distribution Minimum Operating Pressure	50 psi
Distribution	Fire Suppression Residual Pressure	20 psi
Fire Suppression	Fire Suppression Flow and Volume	International Fire Code

Impact Fees for the drinking water system will be uniform per ERC across the impact fee area. The IFFP projects require a total cost of $1,914,300.

PURPOSE AND BACKGROUND

The purpose of this IFFP is to provide direction to Highland City regarding facilities required for future drinking water connections within the next ten years for the undeveloped USDC property located in the southeast corner of the City.

Highland City is located on a bench near American Fork, Lehi, and Alpine in northern Utah County. According to City information the drinking water system provides service to approximately 17,090 residents.

EXISTING SYSTEM DESCRIPTION

Since 2005 the City of Highland has owned, operated, and maintained the drinking water system. The drinking water system provides primarily indoor water use, with certain exceptions. These exceptions are for a small amount of residents still utilizing outdoor irrigation and industrial use at the gravel pits during the winter months. The city's secondary system provides for outdoor water use.

Several landowners formed the Highland Water Company in 1958 to provide drinking water via a central system versus utilizing individual wells. Soon after, the first well was drilled and a storage tank was constructed in 1958. Other tanks, wells, pump stations, and water lines have since been installed to form the present drinking water system.

During the fall of 2004 the membership of the Water Company voted to dissolve the Company and transfer all assets and obligations to the City of Highland.

Drinking water pipe diameters range from 2-inches to 18-inches, with the majority being 6 or 8 inches within the individual subdivision developments. Highland's current standard is the exclusive use of ductile iron pipe.

Hansen, Allen, & Luce Inc. completed a Drinking Water Master Plan Update for Highland City in 2012. Information from the master plan was used in conjunction with data from Highland City to determine the level of service, facilities requirements, and system growth which was used to create this IFFP.

GROWTH

Growth for the subject property was derived from the Properties Master Plan completed by DesigWorkshop in June of 2013. The plan presented 1,160 ERCs for the proposed fully developed property. It is assumed that the property would become fully developed within the next ten years.

LEVEL OF SERVICE

The level of service is the "defined performance standard or unit of demand for each capital component of a public facility within a service area" according to the Utah Impact Fees Act (Utah Division of Administrative Rules, 2011). The service area for the level of service in this plan is the Southeast Service Area (Utah State Developmental Center).

The existing and proposed level of service for the distribution portion of the drinking water system was examined. The City will provide the same level of service for the future development as it provides now for its existing system. Impact fees may not be used to pay for any services above the existing level of service.

Distribution

The level of service of the distribution system is based on minimum allowable pressures of operation during peak day demands and during fire demands. The level of service for Peak Day Demand is based on the Utah State Division of Drinking Water (DDW) minimum sizing requirements for source supply of 800 gpd (0.56 gpm) per ERC. It is proposed that the level of service for future connections be equal to the existing level of service.

Highland City maintains minimum pressures of 50 psi at all service connections in the system under normal operating conditions. The minimum pressure of 50 psi is the proposed and existing level of service for the distribution system under normal operating conditions.

Per DDW requirements water systems with fire hydrants must maintain a 20 psi residual pressure, in the system, during a peak day plus fire flow event. Fire suppression flow and volume are provided per the International Fire Code. The City currently complies with the level of service.

Summary

Table 2 is a summary of the existing and proposed level of service (LOS) for existing and future predicted ERCs.

Table 2
Level of Service Summary

	LOS per ERC
ERCs	1
Peak Day Source Flow Rate (gpd)	800
Distribution Minimum Operating Pressure	50 psi
Fire Suppression Residual Pressure	20 psi

EXCESS CAPACITY

The existing system has excess capacity within its sources, storage and distribution facilities to service area with drinking water. However, costs incurred to create the existing system cannot be factored into the impact fees because the Water Company, not the City, funded the cost to construct the facilities. Therefore, only costs for future projects are included in the impact fees.

FUTURE FACILITIES

Data for the proposed distribution projects and their associated costs were provided within the 2012 Master Plan. The projects were estimated to be completed in the next ten years. The distribution projects are those required to increase the capacity of the distribution system in order to serve the future area.

IMPACT FEE FACILITY PLAN

Impact Fees for the City drinking water system will be uniform per ERC across the service area. Table 3 contains the City's 2015-2024 Impact Fee Facility Plan. Each project is listed with the estimated 2015 cost. All of the projects are planned only for the ERCs in the service area. The IFFP projects total $1,914,300 of which 100% of the cost is attributable to growth.

Table 3
Impact Fee Facility Plan

TYPE	RECOMMENDED PROJECT	Cost Estimate
Distribution – Growth Project	Master Plan #2 Project – Install 1,200 feet of 12-inch transmission line in 11000 North from Well #2 to Park Drive (near the City's Operations Building). The line is required to provide fire suppression flows to the southeast area.	$164,000
Distribution – Growth Project	Master Plan #14 Project – Install 14,000 feet of 12-inch transmission line for new development. Also included connection to 4800 West and the existing Lone Peak School loop and canal crossing.	$1,741,000
IFFP – Growth Project	Impact Fee Facility Plan	$9,300
	TOTAL	**$1,914,300**

REVENUE OPTIONS

Revenue options for the recommended projects, in addition to use fees, could include the following options: general obligation bonds, revenue bonds, State/Federal grants and loans, and impact fees. In reality, the City may need to consider a combination of these funding options. The following discussion describes each of these options.

General Obligation Bonds through Property Taxes

This form of debt enables the City to issue general obligation bonds for capital improvements and replacement. General Obligation (G.O.) Bonds would be used for items not typically financed through the Water Revenue Bonds (for example, the purchase of water source to ensure a sufficient water supply for the City in the future). G.O. bonds are debt instruments backed by the full faith and credit of the City which would be secured by an unconditional pledge of the City to levy assessments, charges or ad valorem taxes necessary to retire the bonds. G.O. bonds are the lowest-cost form of debt financing available to local governments and can be combined with other revenue sources such as specific fees, or special assessment charges to form a dual security through the City's revenue generating authority. These bonds are supported by the City as a whole, so the amount of debt issued for the water system is limited to a fixed percentage of the real market value for taxable property within the City. For growth related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

Revenue Bonds

This form of debt financing is also available to the City for utility related capital improvements. Unlike G.O. bonds, revenue bonds are not backed by the City as a whole, but constitute a lien against the water service charge revenues of a Water Utility. Revenue bonds present a greater risk to the investor than do G.O. bonds, since repayment of debt depends on an adequate revenue stream, legally defensible rate structure /and sound fiscal management by the issuing jurisdiction. Due to this increased risk, revenue bonds generally require a higher interest rate than G.O. bonds, although currently interest rates are at historic lows. This type of debt also has very specific coverage requirements in the form of a reserve fund specifying an amount, usually expressed in terms of average or maximum debt service due in any future year. This debt service is required to be held as a cash reserve for annual debt service payment to the benefit of bondholders. Typically, voter approval is not required when issuing revenue bonds. For growth related projects this type of revenue places an unfair burden on existing residents as they had previously paid for their level of service.

State/Federal Grants and Loans

Historically, both local and county governments have experienced significant infrastructure funding support from state and federal government agencies in the form of block grants, direct grants in aid, interagency loans, and general revenue sharing. Federal expenditure pressures and virtual elimination of federal revenue sharing dollars are clear indicators that local government may be left to its own devices regarding infrastructure finance in general. However, state/federal grants and loans should be further investigated as a possible funding source for needed water system improvements.

It is also important to assess likely trends regarding federal / state assistance in infrastructure financing. Future trends indicate that grants will be replaced by loans through a public works revolving fund. Local governments can expect to access these revolving funds or public works trust funds by demonstrating both the need for and the ability to repay the borrowed monies, with interest. As with the revenue bonds discussed earlier, the ability of infrastructure programs to wisely manage their own finances will be a key element in evaluating whether many secondary funding sources, such as federal/state loans, will be available to the City.

Impact Fees

An impact fee is a one-time charge to a new development for the purpose of raising funds for the construction of improvements required by the new growth and to maintain the current level of service. Impact fees in Utah are regulated by the Impact Fee Statute and substantial case law. Impact fees are a form of a development exaction that requires a fee to offset the burdens created by the development on existing municipal services. Funding the future improvements required by growth through impact fees does not place the burden on existing residents to provide funding of these new improvements.

User Fees

Similar to property taxes on existing residents, User Fees to pay for improvements related to new growth related projects places an unfair burden on existing residents as they had previously paid for their level of service.

REFERENCES

Utah State Developmental Center (USDC). 2013. *Properties Master Plan in Utah County.* American Fork, UT: Utah State Developmental Center.

Hansen, Allen, & Luce, Inc. 2012. *Highland City Drinking Water System Master Plan.* Midvale, UT: Hansen, Allen, & Luce, Inc.

Utah Division of Administrative Rules. 2011. *Utah Administrative Code, Title 11 36a Impact Fees Act.* The Department of Administrative Services.

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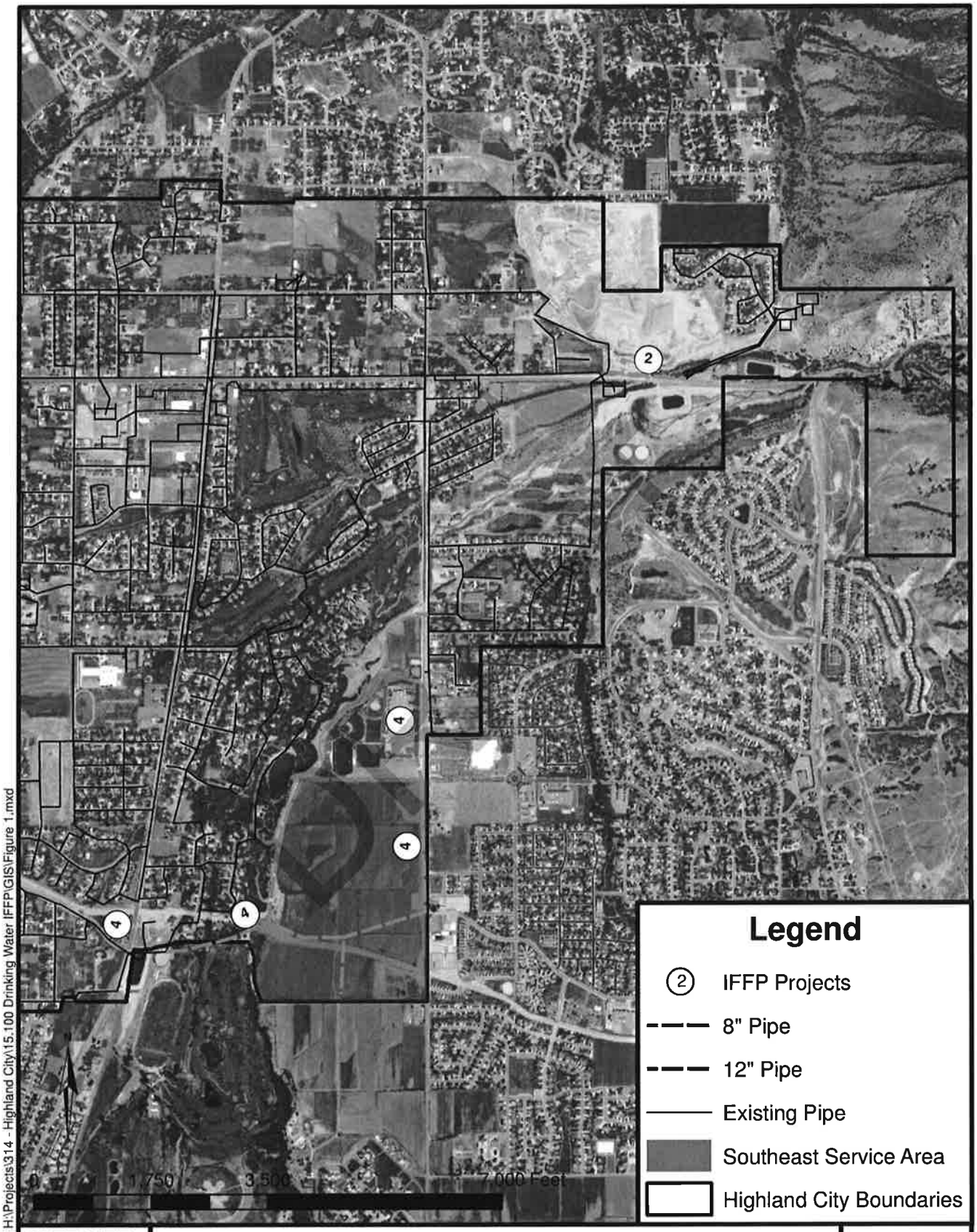

HANSEN ALLEN & LUCE inc
ENGINEERS

HIGHLAND CITY DRINKING WATER IFFP SERVICE AREA & IFFP PROJECTS

FIGURE 1

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